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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,436	09/26/2003	William Chen	API68HO	8504
20178 7590 07/16/2007 EPSON RESEARCH AND DEVELOPMENT INC INTELLECTUAL PROPERTY DEPT 2580 ORCHARD PARKWAY, SUITE 225 SAN JOSE, CA 95131			EXAMINER SAADAT, CAMERON	
			ART UNIT 3714	PAPER NUMBER
			MAIL DATE 07/16/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/672,436

Applicant(s)

CHEN ET AL.

Examiner

Cameron Saadat

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) 1-5, 14-16 and 22-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-9, 11 and 17-20 is/are rejected.
- 7) ☒ Claim(s) 10, 12, 13, and 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/26/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 4/26/2007.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

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**DETAILED ACTION**

In response to restriction election filed 4/12/2007, claims 1-37 are pending in this application. Claims 1-5, 14-16, and 22-37 are withdrawn from consideration for being directed to a non-elected invention.

***Election/Restrictions***

Applicant's election with traverse of Group II (claims 6-13 and 17-21) in the reply filed on 4/12/2007 is acknowledged. The traversal is on the ground(s) that applicant believes that Group IV (claims 28-32) should be included with the claims in group II, as the two groups of claims are sufficiently related so as not to place an undue burden on the Examiner. The examiner disagrees. Group IV (claims 28-32) are drawn to a system configured to provide a real-time summarization of a meeting by capturing a presentation with an image capture device and sending the presentation to a media server, and generating summary data associated with transition points in the meeting. Whereas, Group II (claims 6-13 and 17-21) are drawn to a method for creating a summary of an audiovisual presentation by segmenting a frame of the presentation, identifying a slide region, generating a histogram representing lines in the slide region, and suppressing moving regions of the successive frames of the histogram. These inventions are distinct and have acquired a separate status in the art because of their recognized divergent subject matter. Accordingly, the requirement is still deemed proper and is therefore made FINAL.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall

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have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 6-7 and 17-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Gong et al. (US 7,016,540; hereinafter Gong).**

Regarding claims 6 and 17, Gong discloses a computerized system and method for creating a summary of an audiovisual presentation, including the steps of: segmenting a frame of the audiovisual presentation; identifying a slide region of the segmented frame; generating a histogram representing lines in the slide region (See Col. 5, line 45 – Col. 6, line 60); and suppressing moving regions associated with successive frames from the histogram. See Col. 8, lines 47-51; Col. 12, lines 56-59.

Regarding claims 7 and 18, Gong creates a histogram from a stored slide associated with the slide region; and matching the histogram representing lines in the slide region with the histogram from the stored slide. See Col. 6, line 64 – Col. 7, line 24.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 8-9 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gong in view of Abdeljaoud et al. (US 6,690,725; hereinafter Abdeljaoud).**

Gong does not explicitly disclose the claimed feature of determining a shape ratio of the slide region (as per claims 8 and 19); providing edge detection (as per claims 9 and 20). However, Abdeljaoud discloses a system and method for generating summarized videos, indicating that it is well known to utilize attributes of frames such as shape and utilizing boundary detection for video summarization (See Col. 2, lines 17-20). Thus, in view Abdeljaoud, it would have been obvious to identify slide regions by utilizing shape, to provide key frame extraction for video summarization.

**Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gong in view of Erol et al. (US 2004/0202349; hereinafter Erol).**

Gong discloses all of the claimed subject matter with the exception of explicitly disclosing the feature of segmenting a frame of the audiovisual presentation includes, comparing each pixel value of the frame with neighbor pixel values in causal order. However, Erol discloses a system for comparing contents of images, wherein pixel detection is utilized in order to provide line profile matching (see Paragraph 125). In view of Erol, it would have been obvious to modify the segmenting described in Gong, by providing pixel detection and comparison, in order to identify edge pixels and thereby identify text regions.

#### **Allowable Subject Matter**

Claims 10 and 21 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the

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indication of allowable subject matter: Patentability is seen in, although not limited to the combination of claimed elements including the features of suppressing moving regions associated with successive frames from the histogram includes, capturing a foreground silhouette; copying the foreground silhouette; assigning the copied foreground silhouette a most recent timestamp; and generating a motion mask, wherein edges located within the motion mask are excluded from the histogram. The closest prior art of record does not teach or fairly suggest this feature in the combination.

Claims 12-13 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: Patentability is seen in, although not limited to the combination of claimed elements including the feature of segmenting by comparing each pixel value of the frame with neighbor pixel values in causal order, wherein the neighbor pixel values include five neighbor pixel values.

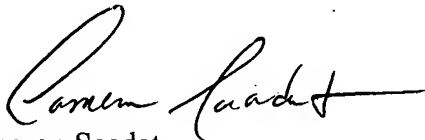
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cameron Saadat whose telephone number is (571) 272-4443. The examiner can normally be reached on M-F 9:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert E. Pezzuto can be reached on (571) 272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read "Cameron Saadat", with a stylized flourish at the end.

Cameron Saadat  
Patent Examiner  
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7/9/2007